Solvency II is a European regulatory framework directive currently scheduled to come into effect across the European Union on 1 January 2013. The framework regulates the solvency of reinsurers and insurers which operate in the European Economic Area (EEA), constituted of the European Union, Iceland, Liechtenstein and Norway. It will be supplemented by Level 2 implementing measures (to be produced by the European Commission) and Level 3 guidance from the new European super-regulator, EIOPA. These measures have yet to be finalized. As drafted, Solvency II will affect the asset allocation choices those groups make, particularly in long-term illiquid investments including private equity, regardless of geographic region or strategy.

The objective of Solvency II is to protect insurance policyholders, harmonize the prudential regulatory frameworks within the EU and minimize the likelihood of a buildup of systemic risk across the financial system. The framework takes a risk-based approach and it sets out the capital that (re)insurers are required to hold against the assets in which they invest. Solvency II treats private equity as a high risk asset class and requires (re)insurers to hold higher levels of regulatory capital compared with holdings in certain other asset classes.

Whilst Solvency II clearly regulates (re)insurers (with exemptions for small firms), the pension funds of certain EU countries may also fall within the scope of Solvency II, including Denmark where occupational pensions are effectively set up as insured contracts. Additionally, Solvency II may have broader impact beyond the (re)insurance industry and outside of Europe’s borders. Regulators in the U.S. and Asia are believed to be monitoring the development of Solvency II to assess whether and the extent to which its principles may be integrated within their own solvency regimes. The principles of Solvency II may also be applied in some measure to proposed revisions to the regulatory regime for European pension funds.

Solvency II is not just about capital adequacy. It is based upon three “pillars”: (1) capital requirements; (2) corporate governance, risk management and supervision; and (3) transparency and public disclosure requirements. This briefing addresses the capital requirements aspects, or Pillar I of the Solvency II framework only.

Calculating Capital Requirements under Solvency II

In addition to holding assets against their liabilities (referred to as technical provisions), (re)insurers will be required to hold capital to cover:

- Solvency Capital Requirement (SCR) = a risk-based assessment (based on the risks associated with the (re)insurer’s business) of the capital needed to cover significant unforeseen losses
- Minimum Capital Requirement (MCR) = the minimum level of solvency that the firm needs to maintain (based on the risks associated with its portfolio), below which supervisory intervention would be triggered

The SCR measures the minimum capital necessary to absorb two simultaneous severe shocks:
- A downwards shock on assets
- An upwards shock on liabilities

If those two shocks occurred, the intention of the proposed requirements is that the remaining value of the assets should cover the remaining value of the liabilities. The framework requires a (re)insurer to hold sufficient capital as a buffer against the risks it faces over the next 12 months to ensure there is only a 0.5% probability of default (or a 1-in-200 year event) through the proposed 99.5% Value at Risk on calculating capital requirements. In other words, the SCR reflects the risk that an insurer faces to claims it cannot absorb.

Options for (Re)insurers

Solvency II allows (re)insurers to calculate their SCR via one of two approaches, using the Standard Model (where the proposed calibrations are those outlined in this briefing), or an Internal Model. An Internal Model allows (re)insurers to devise their own risk measurement formulae which then must be approved by their national regulator. It is generally expected that smaller insurers will use the Standard Model and larger entities will devise their own Internal Models, as the use of an Internal Model requires the firm to satisfy the Regulator as to its widespread use and robustness.

Entities using Internal Models will have flexibility to match their solvency risks to the risks of the assets that they actually hold. Internal Models may, therefore, provide latitude for insurers to hold less capital than under the Standard Model. One element under the SCR is equity risk. Under the Standard Model, as its name suggests, there is limited flexibility to match risks to actual portfolio investments as the calibrations are pre-determined according to selected asset class benchmarks. The Standard Model bases a private

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1 This implementation date is currently under discussion and likely to be delayed until 1 January 2014.
2 Solvency II affects life and non-life insurers, and reinsurers that operate in the EEA, including insurers that have subsidiaries in the EEA or which deal with EEA counterparties, but excludes certain small firms, pension funds covered by IORP Directive, credit institutions and financial conglomerates
3 European Insurance and Occupational Pensions Authority.
equity portfolio on the LPX50 index, a public benchmark of 50 quoted companies that are private equity-related management companies, asset managers or funds. This index results in a high capital charge for private equity.

**Capital Requirements for Private Equity**

Within the Standard Model, Private Equity sits in the “Other Equity” compartment within the Equity sub-module alongside hedge funds, commodities, other alternative investments, which include infrastructure, and public equities listed in emerging markets countries.

EIOPA is one of three European supervisory authorities tasked with supporting the stability of the financial system and protecting the interests of policyholders and pension scheme members and beneficiaries. The EIOPA has determined that in the standard formula for calculating the SCR, a flat base charge of 49% or €49 should be applied for every €100 invested in private equity. The same charge applies against all the asset classes in the Other Equity compartment. (See Figure 1 for a summary of the charges applied.)

This base charge will alter according to the application of an equity buffer, called the dampener, which is applied annually in a range of −10% to +10% according to movements in public equity markets. The actual charge can therefore vary between 39% and 59%. The dampener is calculated by reference to equity market prices relative to their three-year moving average. The dampener at year end 2009 was −9% so the shock applied to private equity was 40%. The charge is reset to the base charge of 49% at the end of each year and then the relevant dampener is applied. So at year end 2010 the dampener swung to +10% which would set the shock at 59%.

To provide perspective, Global Equity, where public equities listed in EEA and OECD countries sit, is awarded a 39% base capital charge, while Property is awarded 25%. In regard to credit, a three-year AAA corporate bond would attract a charge around 2.5% while its 10-year equivalent would suffer 8.2%. On the other hand, the charge for a three-year BBB bond would be around 6.8%.

No allowance is made for any intra-correlation between the performance under stress of asset classes in the Other Equity compartment under the Standard Model. Correlation is, however, accommodated between the Other Equity compartment and the Global Equity compartment.

Unsurprisingly, the LPX50 index displays high performance correlation to public equities in times of stress. Indeed, it displays a correlation of over 83.5% to the Global Equity compartment, as measured by the MSCI World index. The EIOPA has opted to allow flat correlation of 75% between Other Equity and Global Equity.

**The Effect on Private Equity**

On the face of it, Solvency II seems to discourage investment in long-term illiquid assets, including private equity because of the high set aside capital required. The main beneficiaries on the other hand are sovereign debt and short-dated corporate credit. No set aside capital is proposed for investment in EEA sovereign debt in local currency while single digit set aside capital is required against short-dated corporate credit. No distinction is made between the credit status of EEA sovereigns, while distinction is made between rated corporate credit with AAA short-dated bonds requiring the least amount of set aside capital.

Consequently Solvency II may present challenges for private equity firms, at least under the Standard Model of Pillar I. But it may also create opportunities for those who can serve their clients best through the provision of transparent reporting and data to support larger groups as they develop their Internal Models. At a minimum, it is important that private equity firms understand the implications of Solvency II and opportunities to influence the deliberations on technical specifications before the implementing measures are finalized in spring 2012.

**Timetable**

The European Commission is currently finalizing the technical standards, known as Level 2 implementing measures. These are expected to be published between April and July 2012. Prior to that publication, the European Parliament is expected to adopt a related piece of legislation called the Omnibus II Directive, which will make certain amendments to Solvency II, including giving further powers to EIOPA to adopt binding technical standards in certain areas.

Solvency II is anticipated for full implementation on 1 January 2014 although some Solvency II rules may apply during 2013, such as certain reporting requirements.

**Next steps**

Although it is late in the process, the global private equity industry must continue to make the case for changes to the private equity risk assumptions in the Standard Model so that (re)insurers (and pension funds) are not discouraged from investing on a long-term horizon in illiquid assets. All private equity firms, regardless of where they are located or where they invest, are affected by the Solvency II proposals. It is also important to note that the development and

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*49% is the base shock solvency capital ratio currently required for private equity holdings, not an insurer’s final SCR result other risks have to be taken into account also.
The implementation of the Solvency II regime is being closely monitored by both insurance and pension regulators outside of the European Union.

Key concerns related to the current assumptions of the Standard SCR Model:
1. The selection of the LPX50 index is an inappropriate proxy for measuring private equity risk, as the high correlation to public equities is unrepresentative of a private equity portfolio.
2. Grouping disparate asset classes such as all private equity and emerging market listed equities in the same compartment is flawed; it assumes all assets are equally risky and behave similarly under extreme stress.
3. There is no risk based evidence to support an average 75% correlation of Other Equity to Public Equity.
4. The standard calibration does not take into account the private equity strategies in which a (re)insurer invests, and therefore a blanket 75% correlation is potentially unrepresentative of the real risks presented by a (re)insurer’s portfolio.

Proposed amendments to the model:
• Replacement of the LPX50 with an alternative performance benchmark before the European Commission publishes its Level 2 proposals in spring 2012; and,
• Separate out the illiquid assets’ sub-groups currently singly classified as “Other Equity” to allow insurers and EIOPA to better assess the risks of those individual asset classes; or
• Allow intra-correlation to be applied between the Other Equity asset classes themselves.

Figure 2 sets out the modules that make up the “Basic SCR.” The “Market Risks” module comprises sub-modules which calibrate the risks for interest rate, spread, equity, property, illiquidity and concentration. The stress tests in each of these sub-modules produce a solvency capital requirement for a particular category of risks. Once all the stress tests have been conducted, these capital requirements are combined. However, they are not simply added together, because the risk events are related to one another: some are likely to occur together, others are very unlikely to occur together.

So, the SCRs of the sub-modules are aggregated using “correlation matrices,” which capture the likelihood of risks occurring at the same time. Once each risk module’s SCR has been calculated, these too are aggregated again using correlation matrices, to produce the “Basic SCR.” This is then modified to account for deferred tax and the group’s operational risk, giving the company’s overall SCR. Because of this aggregation approach, there is no opportunity within the Standard Model for (re)insurers to calculate the capital charge for their investments in private equity alone.

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